Documentation questionnaire

for VIDAR film digitizers

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Instructions:
1. Cut along dotted line at left.
2. Fill in.
3. E-mail or fax to VIDAR.

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	Poor				Excellent
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Accuracy	1	2	3	4	5
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Did you find errors? If so, please tell us about them.

Page no.	Description

continued...

How could this document be improved?

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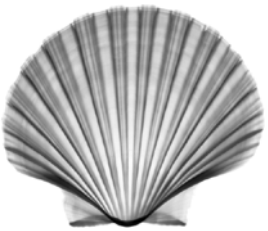
Installation guide for

SIERRA™ *plus* film digitizers

- Single film feeder
- Multi-film feeder



VIDAR Part Number 15247-001 Rev. A
January, 2002
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This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area can cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

Product compliance testing was conducted using VIDAR shielded cables. Modifications to VIDAR shielded cables or the use of cables other than those available from VIDAR could void the user's authority to operate the equipment.

SIERRA™ *plus* carries the CE mark, issued by G-MED (registration number 0459) in accordance with EC-MDD directive 93/42/ECC.

Caution: No operator-serviceable parts inside. Refer servicing to qualified personnel.

Achtung: Gehäuse nicht öffnen. Wartung uno reparatur nur durch eletrofachkräfte.

Attention: Aucune piece ne peut etre remplacee par l'utilisateur. Toute operation de maintenance doit etre effectuee par une personne qualiee.

Atencion: Acceso interno solo autorizado a personal tecnico cualificado.

Attenzione: Non appire. Rivolgersi a personale qualificado.

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Unpacking

the SIERRA™ *plus* film digitizer

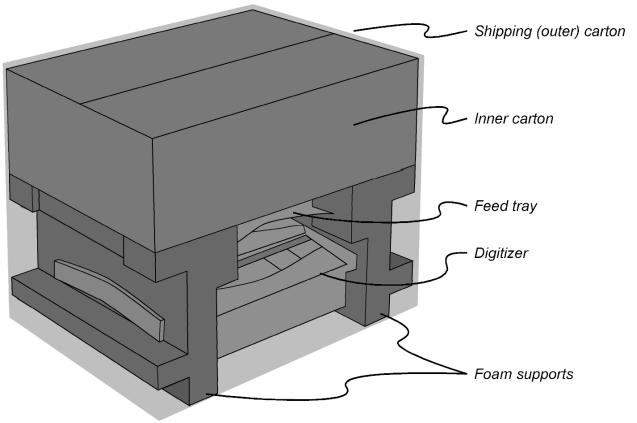
In this chapter, you will:
- Unpack and inspect the digitizer's parts.
- Identify the digitizer's parts.

1. Look for damage.

Before unpacking the SIERRA™ *plus* film digitizer, examine the shipping carton for damage.

If the carton is damaged:
- **Notify the shipper immediately.**
- **Take photographs of the damage.**
- **Notify VIDAR Medical Support at 1 (800) 471-SCAN.**
- **Send pictures and description of damage to medtech@vidar.com.**

What's inside the carton?

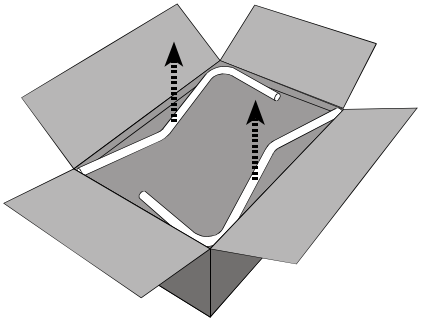


2. Unpack the shipping carton.

IMPORTANT: Save the outer carton, inner carton, cardboard separators, foam supports, plastic bag and cardboard shutter-lock. If you need to ship the digitizer later, you should repack it in the original materials by reversing the procedure described here.

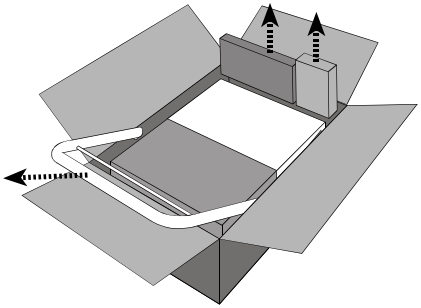
a. Remove the inner carton from the shipping (outer) carton. Open the inner carton.

b. Remove the documentation, power cable and SCSI cable. Loosen—DO NOT CUT—the tie-wraps. Remove the two leg tubes.

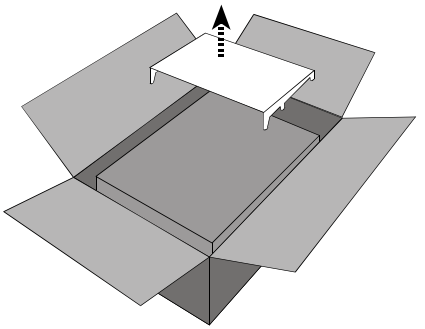


c. Remove the cardboard upper separator.

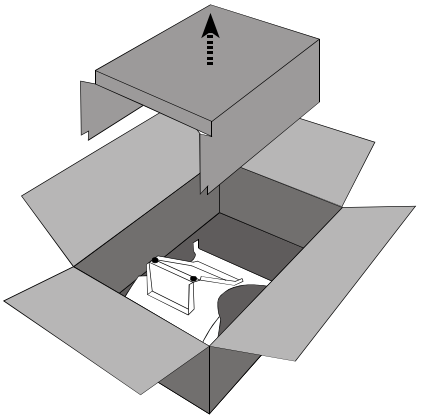
d. Remove the two small boxes packed at one end. Remove the "U" tube.



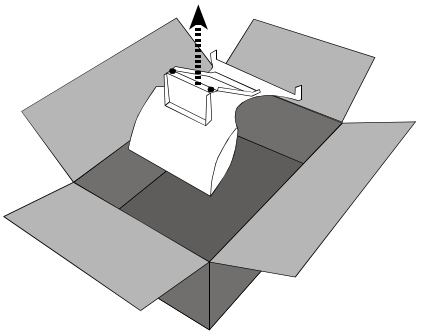
e. Remove the mounting bracket by lifting it straight up.



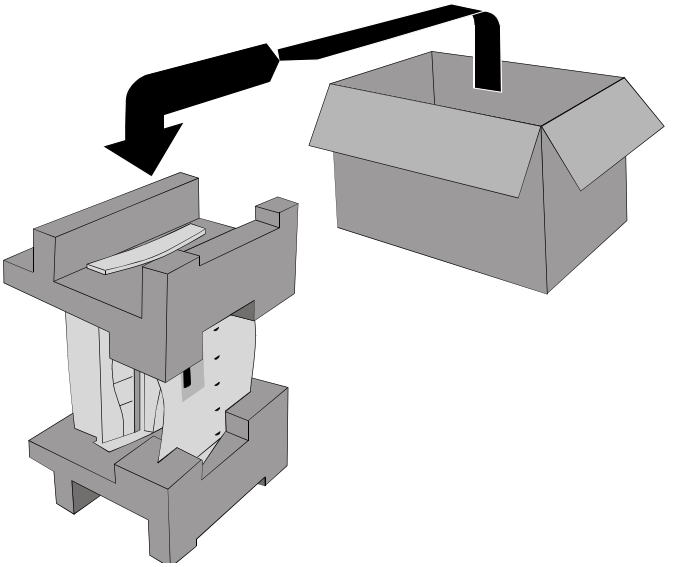
f. Remove the cardboard lower separator.



g. Remove the exit tray.

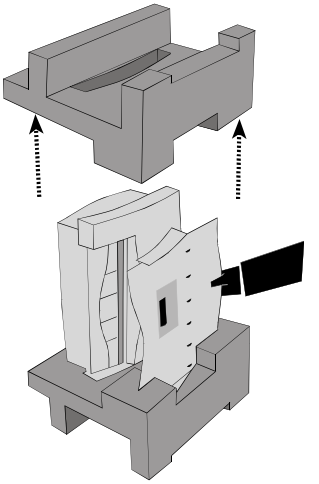


h. Lift both foam supports—with the items they are supporting—up and out of the shipping carton, then stand everything on one support.

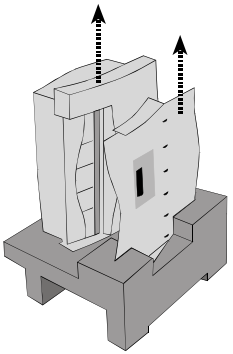


i. Remove the plastic bag surrounding the foam supports.

j. Hold the feed tray (the smaller of the two items between the foam supports) while removing the upper foam support.



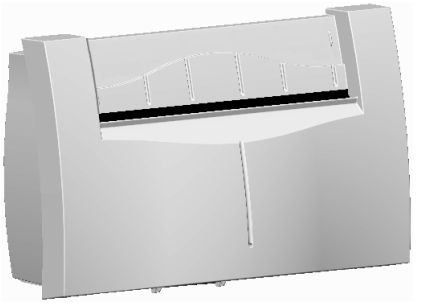
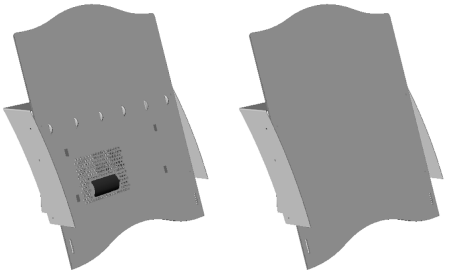
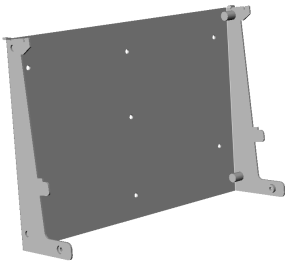
k. Remove the feed tray and place it securely on a horizontal surface. Then remove the film digitizer and place it securely on a horizontal surface.



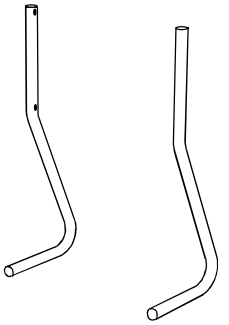
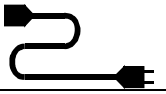
3. Identify the parts.

Check carefully to ensure you received the items listed below.

Standard items

✓	**Description**	(**Note:** items are not shown to same scale.)
☐	SIERRA™ *plus* film digitizer	
☐	Feed tray (Multi-film **or** single film)	 Multi-film Single film
☐	Mounting bracket	

continued

✓	**Description**	(**Note:** items are not shown to same scale.)
☐	Exit tray	
☐	Two leg tubes	
☐	"U" tube	
☐	Power Supply	
☐	Electrical power cord; either U.S. medical power cord, or Euro-style power cord	

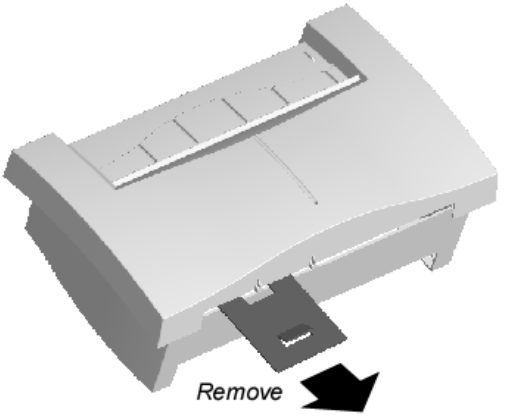
✓	**Description** (**Note:** items are not shown to same scale.)
☐	SCSI box (Adaptec 2930 SCSI card and software)
☐	Multi-film feed tray cable, Vidar part number 4200-001 (if unit has multi-film feed tray)
☐	Switch adjusting tool
✓	*Quick start guide* card
☐	Mini SCSI to mini SCSI cable

Optional items

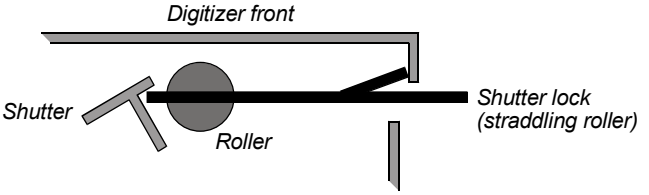
✓	**Description**
☐	Third-party software instructions

4. Remove the shutter lock.

Remove the cardboard shutter lock from the film digitizer.



Note: The shutter lock keeps the shutter in place to prevent damage during shipping. Keep the shutter lock in case the digitizer must be shipped later. For shipping, insert the shutter lock as shown in the cross section diagram below.



5. If anything is missing...

Immediately contact your VIDAR supplier or send e-mail to medtech@vidar.com.

6. Activate your product warranty.

Complete the warranty information/customer survey form at the back of this manual and mail it to VIDAR Systems Corp.

If your digitizer needs service, this information should be on file at VIDAR.

Contact VIDAR Technical Support if you have any questions about installing or using your VIDAR film digitizer:

Phone: 1-888-INFO-471 (1-888-463-6471)

+1-703-471-7070 outside the U.S.

E-mail: medtech@vidar.com

When you contact VIDAR, you will need to provide:

- The unit's serial number.
- Your name, company and contact information.
- Where you purchased the digitizer.

NEXT: Configure the SCSI settings ⇨

Configuring SCSI settings

for the SIERRA™ *plus* film digitizer

In this chapter, you will:
- Set the digitizer's SCSI ID number.
- If necessary, activate the digitizer's SCSI termination.
- Record important information about the digitizer.

1. Set the digitizer's SCSI ID

A computer equipped with a SCSI bus can communicate with multiple SCSI devices (for example: a film digitizer, a scanner and a disk drive). Each device must have a unique SCSI ID number so the computer can distinguish it from other SCSI devices. Valid SCSI ID numbers range from 1 to 6.

When selecting SCSI ID numbers:

- The SCSI Card 2930U is preset to SCSI ID 7 and should not be changed.

- Set the film digitizer to any SCSI ID between 1 and 6, as long as that number is not used by another SCSI device attached to the computer.

  Note: The SIERRA™ *plus* is shipped from the factory with the SCSI ID preset to 3.

- If the system is configured to boot from a SCSI disk drive, it's best to set the disk's SCSI ID to 0 or 1. Most SCSI disks are preset to SCSI ID 0 at the factory.

continued

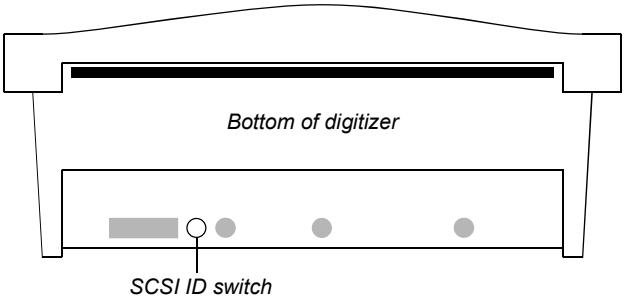
CAUTION: The digitizer and computer MUST be turned OFF before changing the SCSI ID.

To set the digitizer's SCSI ID:

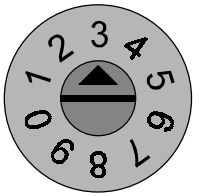
a. Locate the switch adjusting tool.

b. Lay the digitizer on its back, with its bottom surface toward you.

c. Locate the SCSI ID switch.



d. Use the tool's **flat** tip to rotate the SCSI ID switch to the desired SCSI ID number.



Note: Do not set the switch to position **0**, **7**, **8** or **9**, as these are **not valid** SCSI ID numbers.

CAUTION: Do not force switch rotation. Do not use a large screwdriver to rotate the switch.

2. Set the digitizer's SCSI termination.

The SIERRA™ *plus* is configured to be placed at the end of the SCSI chain. The SCSI termination switch is preset at the factory to the **on** position (termination activated).

Note: VIDAR recommends that the Adaptec 2930CU SCSI controller be used **only** for the digitizer. Do not connect internal or external disk drives to the SCSI controller.

Note: VIDAR *does not recommend* daisy-chaining multiple SCSI devices with the film digitizer. If you are considering using the digitizer in daisy-chain configurations, please contact VIDAR Technical Support (medtech@vidar.com).

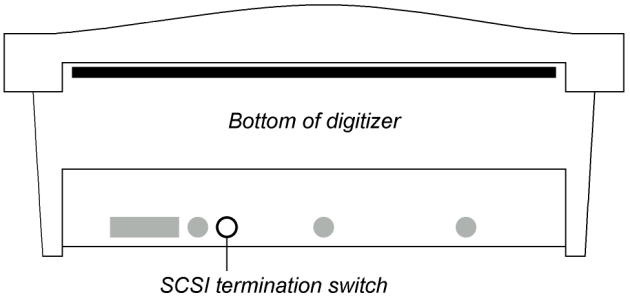
continued

To change the digitizer's SCSI termination:

> **Note:** The SCSI termination switch is preset at the factory for **internal termination on**.

a. Lay the digitizer on its back, with its bottom surface toward you.

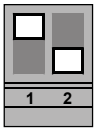
b. Locate the SCSI termination switch on the bottom of the digitizer.



c. Verify that Switch 1 is in the position shown at the top right.

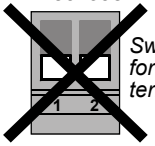
   (Switch 2 has no function.)

Factory (recommended) termination switch setting



Switch 1 set for internal termination

Not recommended

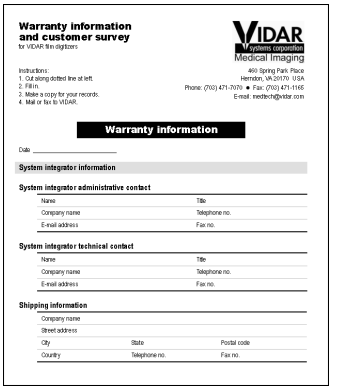


*Switch 1 set for **no** internal termination*

3. Record important information.

Note: You must record this information now. After you mount the digitizer, it will be difficult to see the SCSI switches.

a. Locate the "Warranty information and customer survey" form at the back of this manual.



Warranty information and customer survey
for VIDAR film digitizers

VIDAR
Vision Essential
Medical Imaging

Instructions:
1. Cut along dotted line at left.
2. Fill in.
3. Make a copy for your records.
4. Mail or fax to VIDAR.

490 Spring Park Place
Herndon, VA 20170 USA
Phone: (703) 471-7070 ■ Fax: (703) 471-1165
E-mail: medtech@vidar.com

Warranty information

Date _____

System integrator information

System integrator administrative contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

System integrator technical contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

Shipping information

Company name		
Street address		
City	State	Postal code
Country	Telephone no.	Fax no.

b. In the "System configuration" section, under "Hardware," find the "Digitizer" section.

c. In the "Digitizer" section, record this information:
- Digitizer serial number.
- SCSI ID.
- SCSI termination (on/off).

NEXT: Mount the digitizer on the table-top stand ⇨

or

Mount the digitizer on a wall ⇨

Table-top stand

for the SIERRA™ *plus* film digitizer

The table-top stand is for use in situations where the SIERRA™ *plus* film digitizer cannot be mounted on a wall. The stand was designed to be placed on a table, desk or countertop up to 36" (91cm) high.

SAFETY WARNING

Never place the SIERRA™ *plus* with table-top stand on the floor.

In brief, to assemble the SIERRA™ *plus* film digitizer with the table-top stand you will:

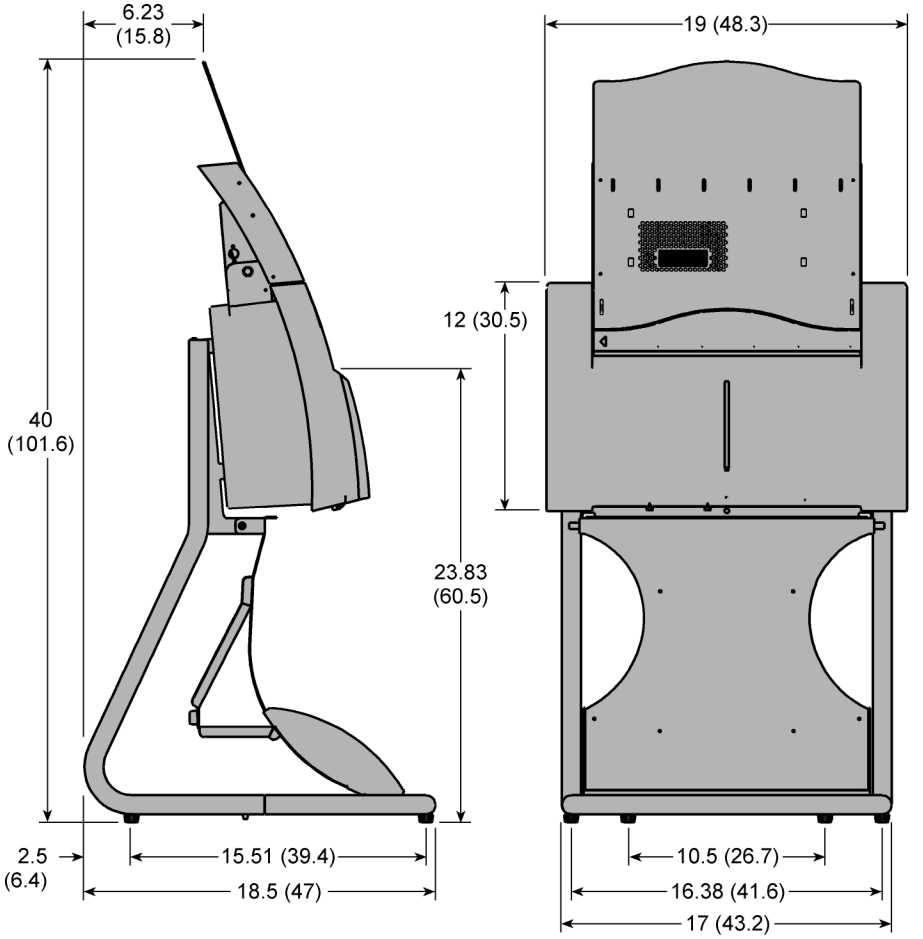
- Assemble the stand and mounting bracket.
- Install the digitizer on the mounting bracket.
- Place the stand-mounted digitizer in a suitable working location.
- Attach power and SCSI cables.
- Install the exit tray.

Instructions are provided in this chapter.

Before you start...

Be sure you have already set the SCSI ID and SCSI termination switches (see the "Configuring SCSI settings" chapter, earlier in this manual). It's easier to see and set these switches before the digitizer is attached to the table-top stand.

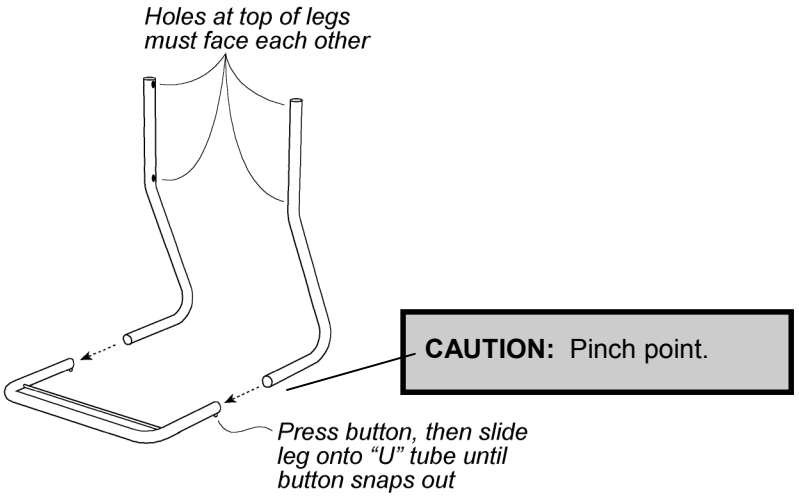
Dimensions with table-top stand



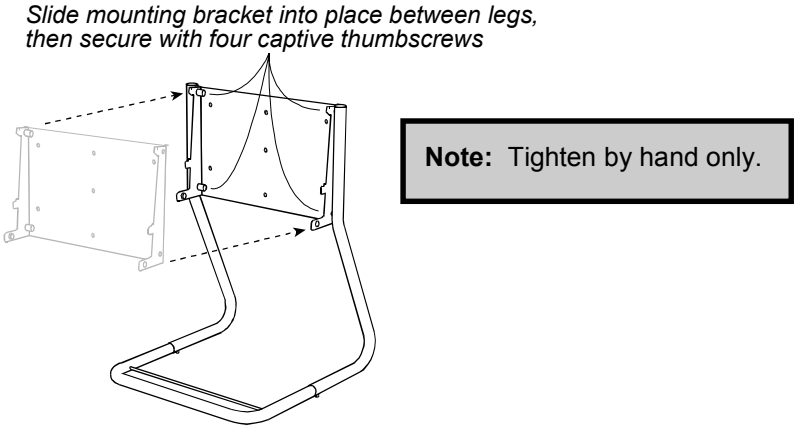
Dimensions are in inches (dimensions in parentheses are in centimeters)

1. Assemble the stand and mounting bracket.

a. Assemble the legs and "U" tube as shown below.


Holes at top of legs must face each other
CAUTION: Pinch point.
Press button, then slide leg onto "U" tube until button snaps out

b. Attach the mounting bracket to the legs as shown below.



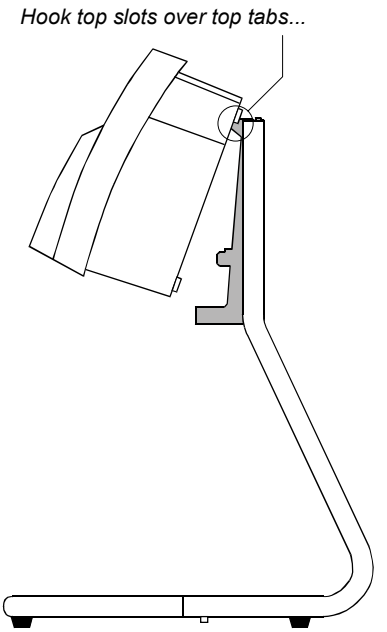
2. Mount the digitizer.

a. Locate the four mounting slots on the back of the digitizer. These slots match the four tabs on the mounting bracket.

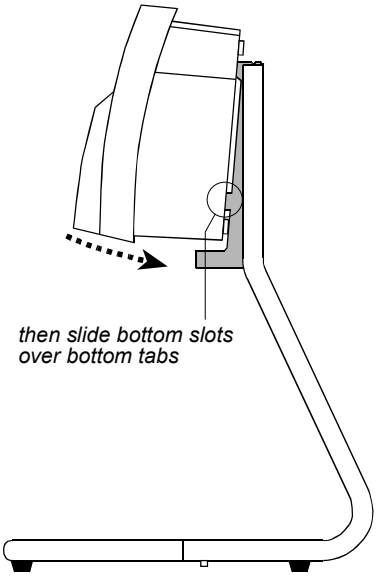
b. Position the digitizer so its front is facing you (VIDAR logo is visible).

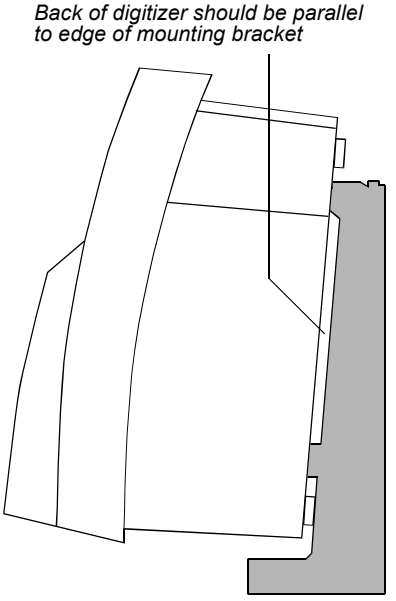
c. Grasp the digitizer by its sides.

d. Slide the digitizer's upper mounting slots over the upper tabs on the mounting bracket (as shown at right). Ensure that the slots drop into the notches in the tabs.



e. Rotate the bottom of the digitizer toward the mounting bracket, so the bottom mounting slots slide over the bottom tabs on the mounting bracket (as shown at right).

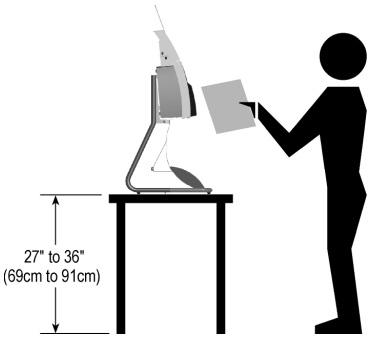




3. Place the digitizer in its working location.

a. Select a working location for the film digitizer. Consider the following points when selecting a suitable location:

- The digitizer can only be used on a desk, countertop or other physically stable surface not more than 36" (91cm) high.



SAFETY WARNING

The digitizer **must** be placed on mechanically secure horizontal surface, such as a desk or countertop not more than 36" (91cm) high.

The digitizer **must not** be placed on the floor.

VIDAR Systems Corp. is not liable for any damages or injuries to persons or property associated with improper placement or use of the digitizer.

- The digitizer must be within about 10 feet (2.5m) of an electrical outlet.
- The SCSI cable must be able to connect to both computer and digitizer.
- The digitizer must be away from traffic.

b. Place the digitizer in the location you have selected. Ensure the digitizer is stable (for example, it should not rock when touched).

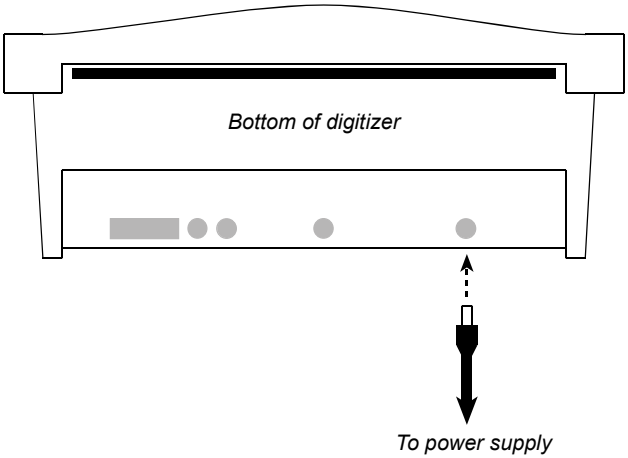
4. Connect the power cable.

a. Locate the power supply. Identify the power cable (permanently attached to the power supply) and the power connector at its end.

WARNING: Do not connect the AC power cord at this time.

b. Plug the end of the power cable into the jack near the right end of the digitizer (as shown below).

IMPORTANT: Never force the power connector.



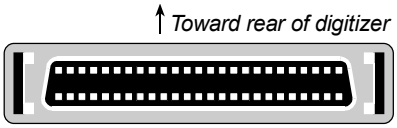
5. Connect the SCSI cable.

Note: Before connecting the SCSI cable, be certain that the SCSI cable isn't connected to anything else and the digitizer power supply is unplugged from the wall.

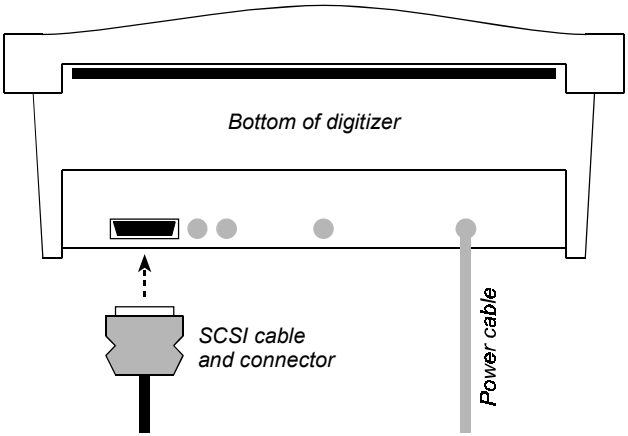
WARNING: Inspect the pins! If the SCSI connector has bent pins, it will damage the SCSI port in the digitizer. Do not attempt to straighten bent pins. Discard any SCSI cable with bent pins and replace it with a new cable.

a. Locate the SCSI cable.

b. Orient the SCSI connector as shown here. ➔

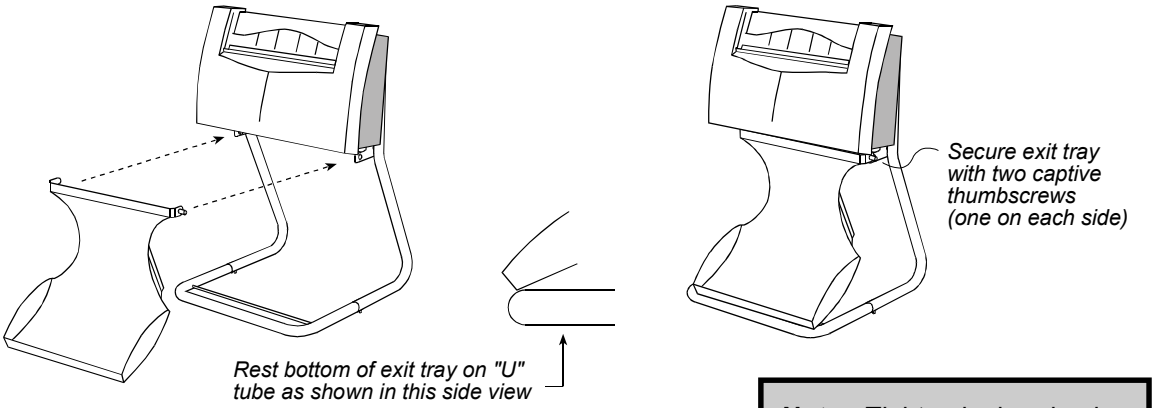


c. **Carefully** attach the SCSI connector to the digitizer's SCSI port connector (located at the opposite end of the digitizer from the power cable). Apply even pressure to avoid bending SCSI connector pins. **Do not force the connectors together.**



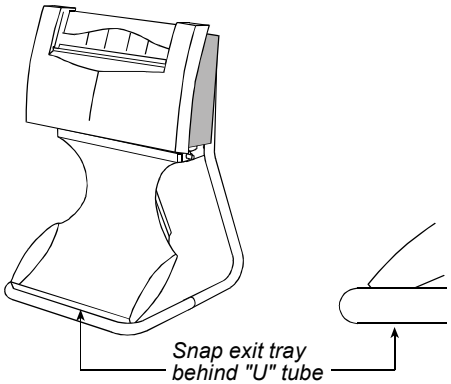
6. Install the exit tray.

a. Position the exit tray below the digitizer, outside the mounting bracket. Rest the bottom end of the exit tray on the outside of the "U" tube. Secure the exit tray using the two captive thumbscrews (one on each side).


Secure exit tray with two captive thumbscrews (one on each side)
Rest bottom of exit tray on "U" tube as shown in this side view

Note: Tighten by hand only.

b. Snap the bottom of the exit tray over the "U" tube, so it rests on the bar extending across the "U" tube.



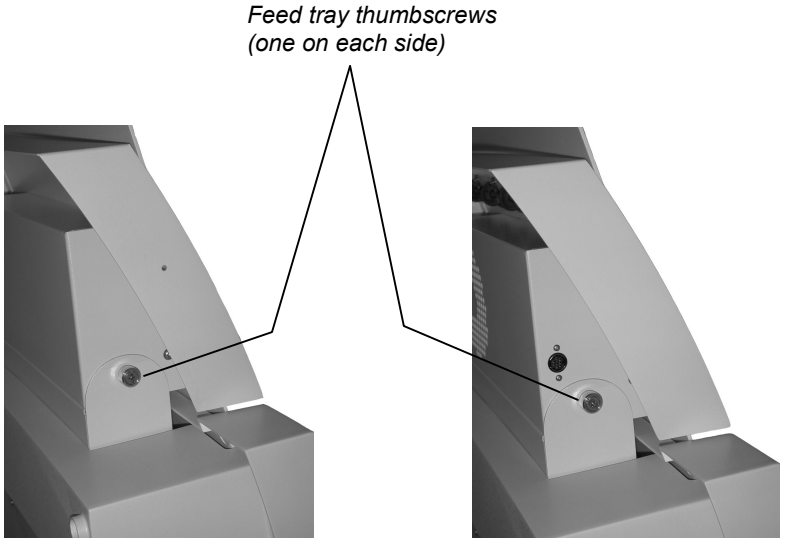
7. Install the feed tray.

a. Position the feed tray on the digitizer as shown below.

Single film feed tray

Multi-film feed tray

b. Secure the feed tray to the digitizer using the two captive thumbscrews on the top of the digitizer (behind the feed tray).

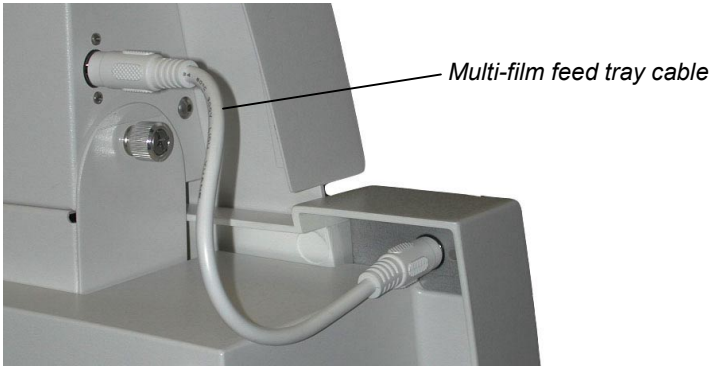


Single film feed tray

Multi-film feed tray

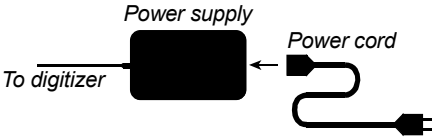
c. If you are installing a multi-film feed tray (having a perforated area and several rollers on the front), then install the multi-film feed tray cable as shown below:
   - Insert one end of the cable into the socket in the feed tray.
   - Insert the other end of the cable into the socket on the digitizer.

Tip: Gently rotate each plug until its key mates with the socket.



8. Connect the power cord to the power supply.

a. Attach the female end of the electrical power cord to the power supply.



Note: Do not plug the power cord into an electrical outlet at this time.

b. Move the power supply, power cable and electrical cord against the wall, out of the way of traffic.

NEXT: Install the SCSI software ⇨

Wall mounting

the SIERRA™ *plus* film digitizer

In brief, to mount the SIERRA™ *plus* film digitizer you will:

- Select appropriate wall space for the digitizer and determine the best height.
- Attach the mounting bracket to the wall.
- Install the digitizer on the mounting bracket.
- Attach SCSI and power cables.
- Install the exit tray.

Details are provided in this chapter.

Before you start...

Be sure you have already set the SCSI ID and SCSI termination switches (see previous chapter). It's easier to see and set these switches before the digitizer is attached to the mounting bracket.

WARNING

Only a qualified building maintenance technician can attach the mounting bracket to a wall (step 3 in this chapter).

Wall mounting of the digitizer must meet all applicable building codes.

VIDAR Systems Corp. is not liable for any damages or injuries to persons or property associated with improper installation or use of the digitizer.

1. Select proper wall space.

SAFETY WARNING

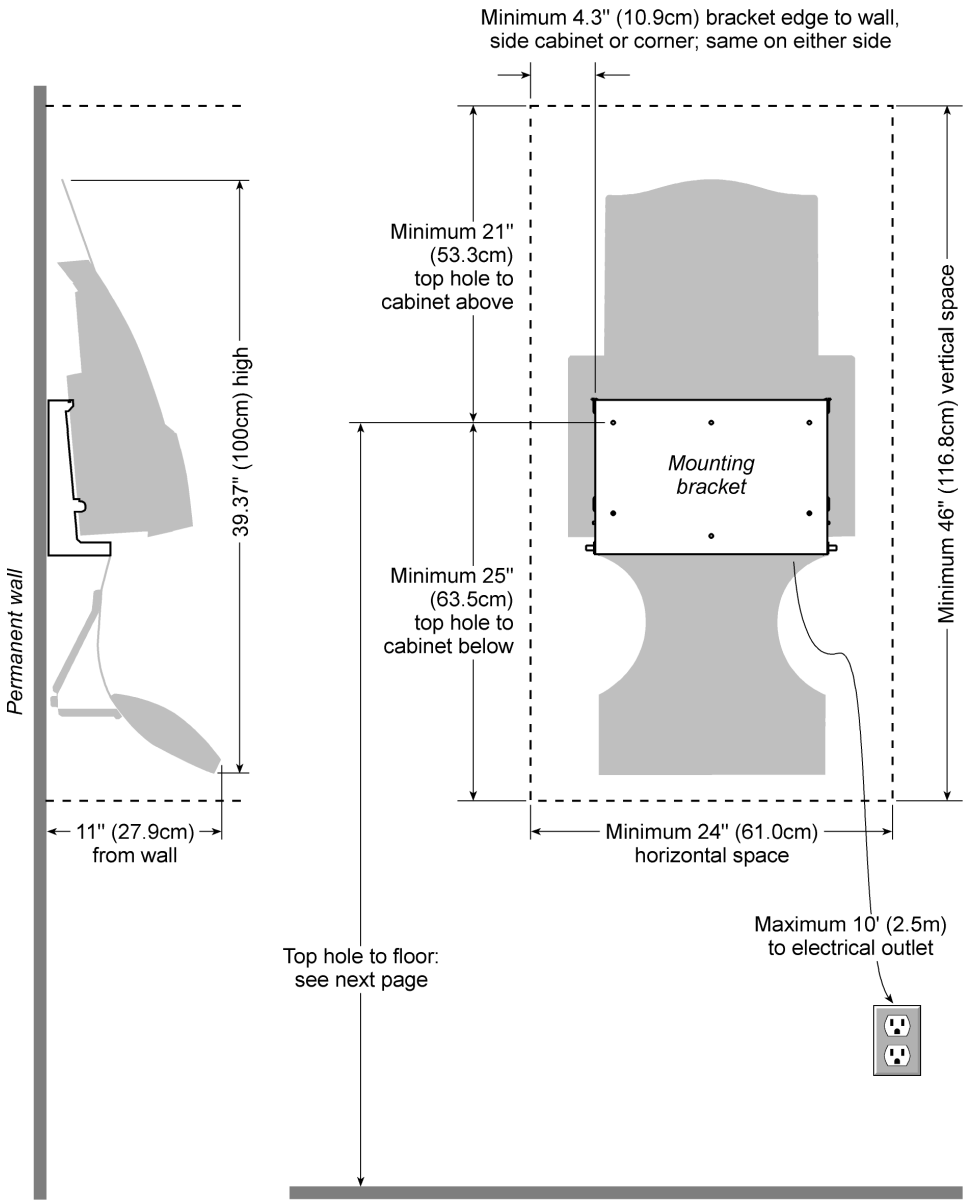
Attach the digitizer-mounting bracket to a permanent wall. Do not attach the mounting bracket to a temporary wall, unsecured wall or wall divider.

Consider the following points when selecting a location for the digitizer:

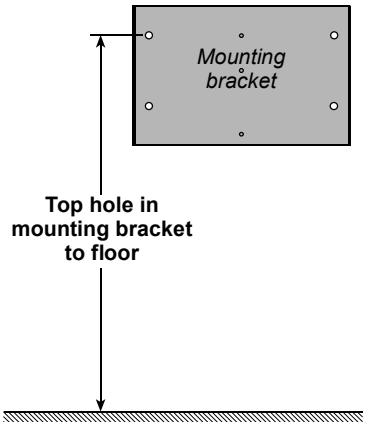
- The digitizer requires a space that is at least:
  - 46 inches (116.8cm) high.
  - 24 inches (61.0cm) wide.
  - 11 inches (27.9cm) deep.
- The digitizer's entrance tray extends above the mounting bracket, and its exit tray extends below the mounting bracket. Carefully study the diagram on the next page to ensure enough wall space is available—above, below and to the sides.
- The digitizer's entrance tray accommodates films up to 17 inches (43.2cm) high. A 17-inch film extends above the feed tray. This is accounted for in the mounting space dimensions on the next page.
- The digitizer can fit below an overhead cabinet, above a countertop, or between an overhead cabinet and a countertop—as long as the mounting dimensions shown on the next page are satisfied.
- Locate the digitizer at an efficient working height. See step 2 in this chapter for recommendations.
- The digitizer must be within 10 feet (2.5m) of an electrical outlet.
- Locate the digitizer away from traffic.

Note: If suitable wall space cannot be found, you **must** mount the digitizer on the table-top stand.

Space required for mounting SIERRA *plus* on wall


Minimum 4.3" (10.9cm) bracket edge to wall, side cabinet or corner; same on either side
Minimum 21" (53.3cm) top hole to cabinet above
Minimum 25" (63.5cm) top hole to cabinet below
Minimum 46" (116.8cm) vertical space
Mounting bracket
39.37" (100cm) high
Permanent wall
11" (27.9cm) from wall
Minimum 24" (61.0cm) horizontal space
Maximum 10' (2.5m) to electrical outlet
Top hole to floor: see next page

2. Determine best mounting bracket height.



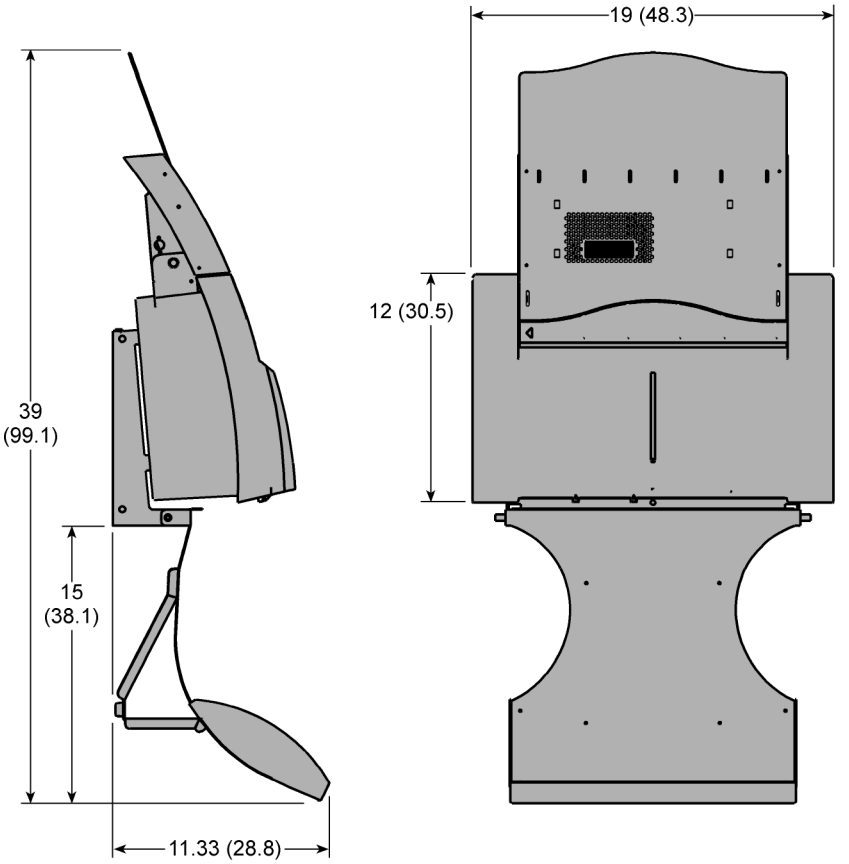
The digitizer should be mounted at a height that supports efficient working. Consider how the digitizer will be used, and by whom:

- Will the operator be sitting or standing?
- If the operator will be sitting, what is the chair's seat height?
- If the operator will be standing, how tall is the operator?

The table below shows where the digitizer mounting bracket's top mounting hole should be located for various operator positions.

Operator position	Distance from top mounting hole to floor	
Lowest possible digitizer height	27"	69cm
❶ Sitting, desk chair (seat height: 16" to 19" / 41cm to 48cm)	27" to 38"	68cm to 96cm
❷ Sitting, lab chair (seat height: 26" to 29" / 66cm to 74cm)	46" to 50"	117cm to 127cm
❸ Standing (operator height: 4'6" to 5' / 137cm to 152cm)	49" to 55"	124cm to 140cm
❹ Standing (operator height: 5' to 5'6" / 152cm to 168cm)	55" to 61"	140cm to 155cm
❺ Standing (operator height: 5'6" to 6' / 168cm to 183cm)	61" to 67"	155cm to 170cm
❻ Standing (operator height: 6' to 6'6" / 183cm to 198cm)	67" to 73"	170cm to 185cm

Dimensions for wall-mounted digitizer



Dimensions are in inches (dimensions in parentheses are in centimeters)

3. Attach the mounting bracket to the wall.

WARNING

Only a qualified building maintenance technician can attach the mounting bracket to a wall. Wall mounting of the digitizer must meet all applicable building codes.

Wall mounting requires the use of four wall anchors (supplied by the customer), each of which must be rated for at least 30 pound load capacity.

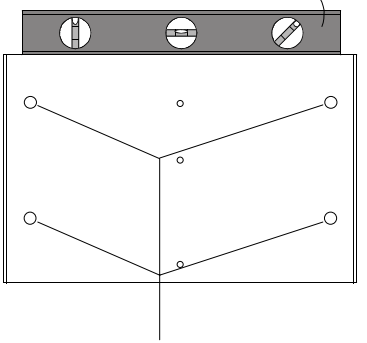
VIDAR Systems Corp. is not liable for any damages or injuries to persons or property associated with improper installation or use of the digitizer.

Taking into account...

- Space requirements (step 1 in this chapter) and
- Height above the floor (step 2 in this chapter) and
- That the bracket must be level (**use a carpenter's level**)...

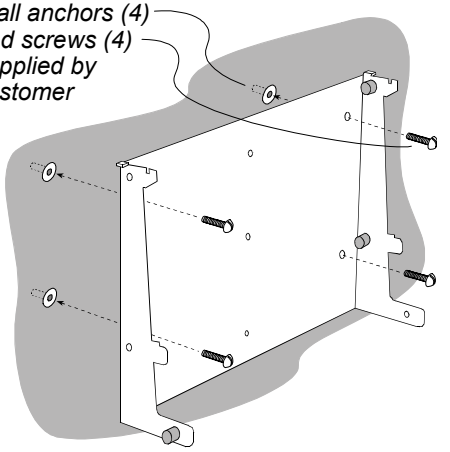
Attach the mounting bracket to a permanent wall using four wall anchors rated for at least 30 pounds each.

Use carpenter's level to assure mounting bracket is horizontal—*films will not feed properly if mounting bracket is tilted*



Use these four holes for wall mounting

Wall anchors (4) and screws (4) supplied by customer



4. Mount the digitizer.

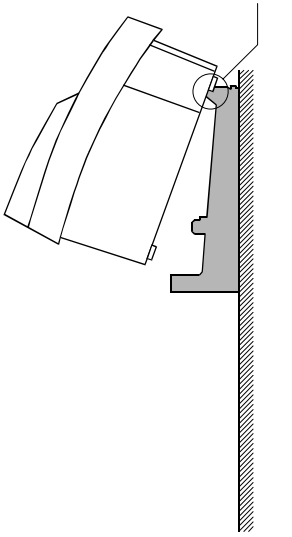
a. Locate the four mounting slots on the back of the digitizer. These slots match the four tabs on the mounting bracket.

b. Position the digitizer so its front is facing you (VIDAR logo is visible).

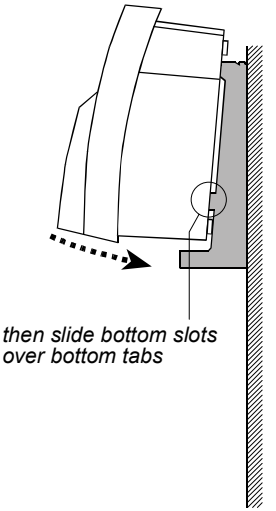
c. Grasp the digitizer by its sides.

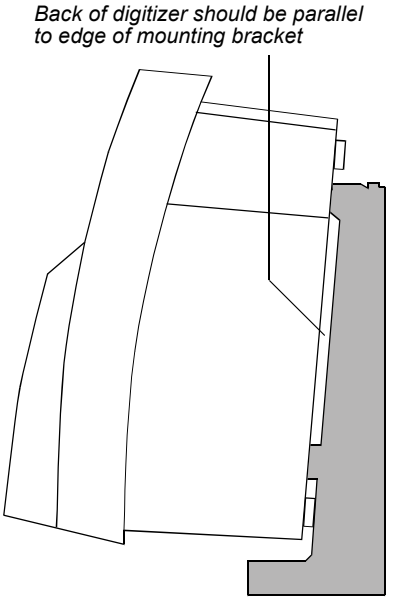
d. Slide the digitizer's upper mounting slots over the upper tabs on the mounting bracket (as shown at right). Ensure that the slots drop into the notches in the tabs.

Hook top slots over top tabs...



e. Rotate the bottom of the digitizer toward the mounting bracket, so the bottom mounting slots slide over the bottom tabs on the mounting bracket (as shown at right).





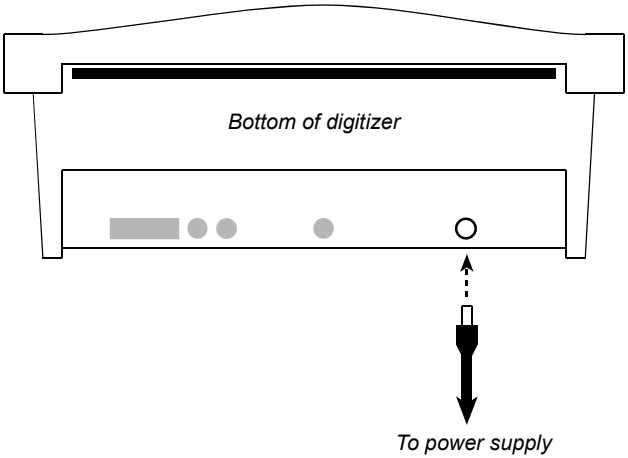
5. Connect the power cable.

a. Locate the power supply. Identify the power cable (permanently attached to the power supply) and the power connector at its end.

WARNING: Do not connect the AC power cord at this time.

b. Plug the end of the power cable into the jack near the right end of the digitizer (as shown below).

IMPORTANT: Never force the power connector.



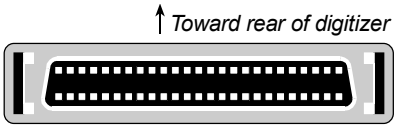
6. Connect the SCSI cable.

Note: Before connecting the SCSI cable, be certain that the SCSI cable isn't connected to anything else and the digitizer power supply is unplugged from the wall.

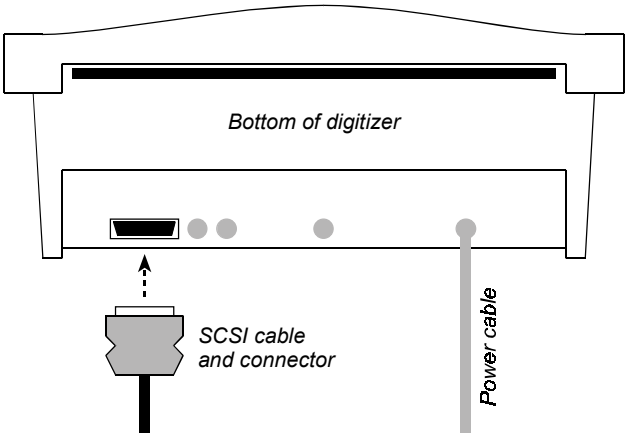
WARNING: Inspect the pins! If the SCSI connector has bent pins, it will damage the SCSI port in the digitizer. Do not attempt to straighten bent pins. Discard any SCSI cable with bent pins and replace it with a new cable.

a. Locate the SCSI cable.

b. Orient the SCSI connector as shown here. ➔



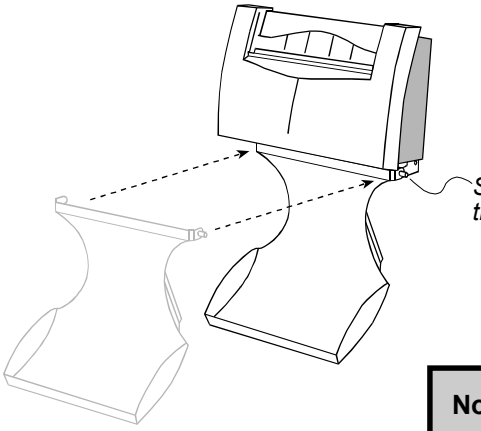
c. **Carefully** attach the SCSI connector to the digitizer's SCSI port connector (located at the opposite end of the digitizer from the power cable). Apply even pressure to avoid bending SCSI connector pins. **Do not force the connectors together.**



7. Install the exit tray.

a. Position the exit tray below the digitizer, outside the mounting bracket. Rubber feet at the back of the exit tray will rest against the wall.

b. Secure the exit tray using the two captive thumbscrews (one on each side).



Note: Tighten by hand only.

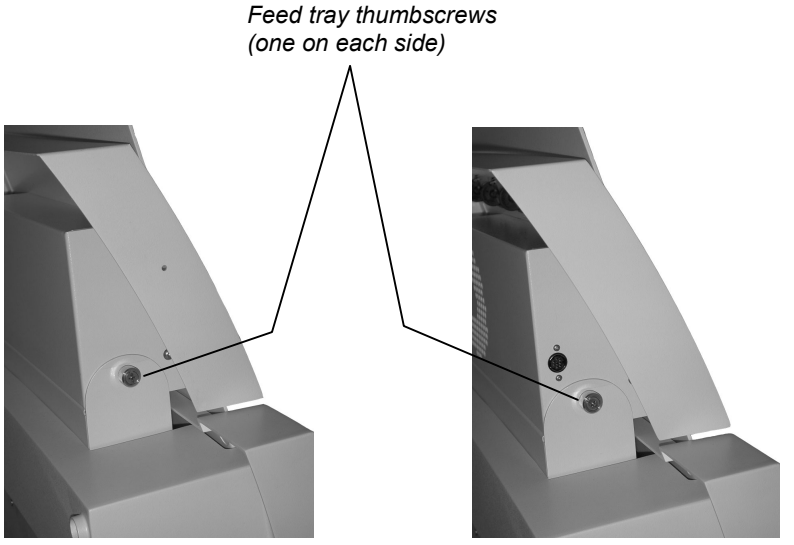
8. Install the feed tray.

a. Position the feed tray on the digitizer as shown below.

Single film feed tray

Multi-film feed tray

b. Secure the feed tray to the digitizer using the two captive thumbscrews on the top of the digitizer (behind the feed tray).

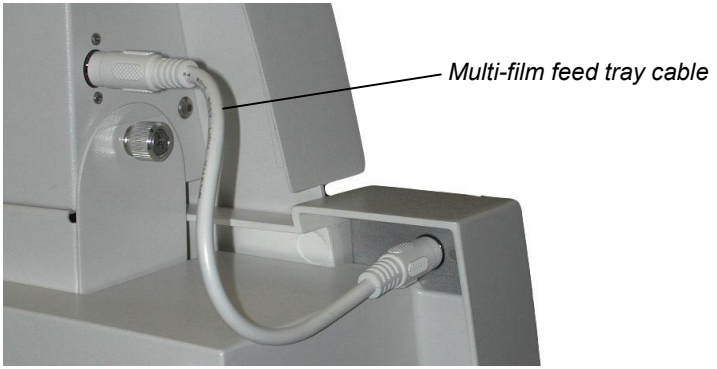


Single film feed tray

Multi-film feed tray

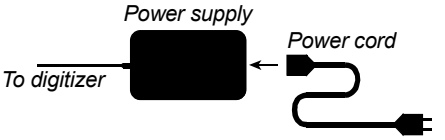
c. If you are installing a multi-film feed tray (having a perforated area and several rollers on the front), then install the multi-film feed tray cable as shown below:
   - Insert one end of the cable into the socket in the feed tray.
   - Insert the other end of the cable into the socket on the digitizer.

Tip: Gently rotate each plug until its key mates with the socket.



9. Connect the power cord to the power supply.

a. Attach the female end of the electrical power cord to the power supply.



Note: Do not plug the power cord into an electrical outlet at this time.

b. Move the power supply, power cable and electrical cord against the wall, out of the way of traffic.

NEXT: Install the SCSI Hardware ⇨

Installing SCSI hardware

for the SIERRA™ *plus* film digitizer

This chapter shows you how to install the SCSI interface card in your computer. You will install the SCSI software the next chapter.

1. Unpack the SCSI accessory box.

Open the Adaptec™ SCSI accessories box and identify the following components:

✓	Description
☐	Adaptec™ SCSI Card 2930U (**CAUTION:** Leave the card in its anti-static package until just before it is installed.)
☐	50-pin internal SCSI cable (not used for SIERRA™ *plus*)
☐	Adaptec™ SCSI driver installer diskette and EZ-SCSI CD-ROM
☐	Adaptec™ documentation

Warning
Before you begin the installation procedure, turn off all power to the computer and peripherals. Connecting the SCSI cable with the power on can cause serious damage to the unit or your computer.

Précaution
Avant de commencer la connexion, assurez vous que votre ordinateur soit bien éteint. Toute connexion du cable SCSI et courant, pourrait gravement endommager votre numériseur ou ordinateur.

Advertencia
Antes de continuar con la instalación, favor de apagar su computadora y periférico. Conectando el cable SCSI con la computadora prendida puede causar daño al equipo o a su computadora.

Warnung
Vor dem Installieren den Computer und angeschlossene Geräte ausschalten. Durch Anschluß des SCSI Kabels an angeschaltete Geräte können ernsthafte Schäden entstehen.

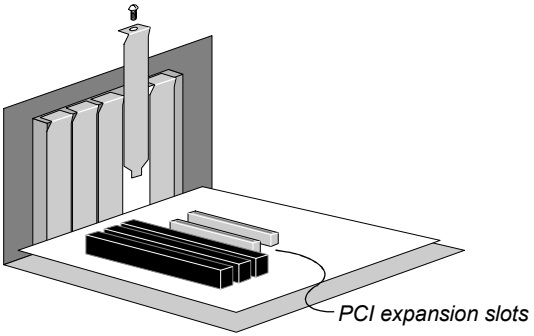
2. Install the SCSI card.

a. Turn off power to the computer and disconnect the computer's power cord from the electrical outlet.

b. Remove the cover from the computer. (Refer to the computer's manual for instructions on removing the cover.)

> **Tip:** If the computer is a tower model, it's easier to install the SCSI card when the tower is laid on its side.

c. Locate an unused PCI expansion slot (PCI connectors are typically white or ivory). Remove the expansion slot cover. Save the slot cover screw for use in step 2g.

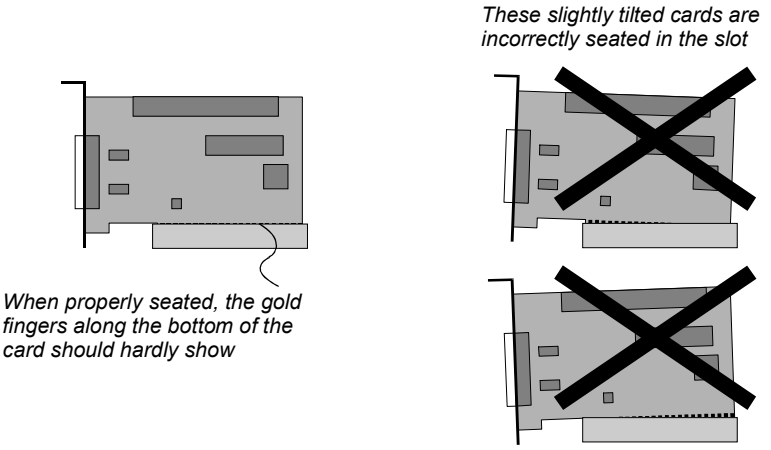


d. Before handling the SCSI card, discharge your static electricity by touching a metal part on the computer chassis.

e. Remove the SCSI Card 2930U from its anti-static packaging. **Handle the card only by its edges.**

continued

f. Insert the SCSI Card 2930U into the PCI expansion slot. Press down firmly until the SCSI card clicks into place.


These slightly tilted cards are incorrectly seated in the slot
When properly seated, the gold fingers along the bottom of the card should hardly show

g. Secure the SCSI card with the expansion slot screw you removed in step 2c.

h. Replace the cover on the computer.

i. Attach one end of a SCSI cable to the SCSI card's external connector.

NEXT: Install the SCSI software ⇨

Installing SCSI software

for the SIERRA™ *plus* film digitizer

So far, you have installed the SCSI hardware in your computer and assembled the film digitizer. This chapter covers the final installation phase: installing SCSI software on your computer.

The steps you follow for SCSI software installation depend on the operating system resident on your computer. Instructions are provided for:

- Windows 2000.
- Windows 98.
- Windows 95.
- Windows NT 4.0.

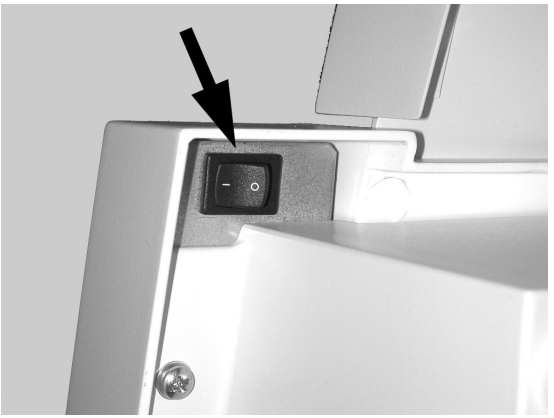
Apply power: digitizer first, then PC

1. Ensure the PC is turned **off**.

   Note: Always apply power to the digitizer before turning on the computer. This enables the computer to recognize the digitizer.

2. Connect the digitizer's electrical power cord (connected to the power supply) to an electrical outlet.

3. Turn on the digitizer. The on/off switch is located behind the upper right corner.



4. Observe the LED on the front of the digitizer: the LED should flash yellow for several minutes. This indicates the digitizer is performing internal tests.

5. When the LED stops flashing and remains green, turn on the PC.

6. Go to the section in this chapter that matches your computer's operating system.

Computers with Windows 2000

> **Note:** Windows 2000 Service Pack 1 must be installed. Computers without Service Pack 1 will not be supported.

1. When the computer boots up, it will detect the SCSI Adapter. Quickly hit **<Ctrl A>** to access the SCSI Utility.

2. Follow the instructions in "Using the SCSI Utility," later in this chapter, to edit the BIOS settings. Return here after rebooting.

3. Windows 2000 will launch the New Hardware Wizard, which will recommend the embedded AIC78xx.sys PCI SCSI driver. Accept this driver, then complete the Wizard's process.

   > **Note:** If the New Hardware Wizard appears during the next boot, cancel it.

   > **Note:** Windows Millennium Edition does not contain an embedded driver for the AHA-2930CU SCSI adapter. Adaptec recommends loading the Windows 98 driver. Instructions for loading PCI SCSI drivers under Windows ME can be found at www.adaptec.com.

4. Install Adaptec EZ-SCSI software from the CD included in the SCSI adapter kit. Reboot as prompted when installation is complete.

   > **Note:** The EZ-SCSI CD wrapper may be marked "Adaptec EZ-SCSI is not yet certified with Microsoft Windows 2000. It is not recommended to install EZ-SCSI software in Windows 2000 environments." Ignore that warning. **The ASPI driver installed by EZ-SCSI is required for VIDAR film digitizer operation.** EZ-SCSI has been installed on many Windows 2000 computers without problems.

5. After Windows 2000 has loaded, launch SCSI Explorer (**Start > Programs > Adaptec EZ-SCSI 5.0 > SCSI Explorer**). Ensure that the digitizer reports correctly in SCSI Explorer — the digitizer's SCSI ID is set to 3 at the factory, and it should report as such in this utility.

6. Check the version numbers for display card's the video drivers. The drivers should be the latest versions, otherwise image quality may be degraded.

> **Tip:** To determine whether poor image quality is caused by outdated video drivers, view an image on this PC and view the same image on a PC that is not running Windows 2000.

Computers with Windows 98

1. After the computer boots, the **Add New Hardware** wizard appears.
2. Click **Next**.
3. Click **Next**. Activate **Search for best driver for your device**.
4. Insert the Adaptec Driver Installer diskette into the diskette drive.
5. When prompted to specify a location, type **a:**\, then click **Next**.
6. Click **Next**. Windows will now select the best driver for the device.
7. Click **Finish**.
8. When the installation is finished, remove the diskette, then click **Yes** to restart the computer. Go to step 2 of "Using the SCSI Utility," later in this chapter.

Computers with Windows 95

Windows 95 has two versions. Use the corresponding steps below.

If the "New Hardware Found" window appears...

1. Select Driver from disk provided by hardware manufacturer.
2. Insert the Adaptec Driver Installer diskette into the diskette drive.
3. In the Install from Disk window, type **a:\win95**. Windows will install the required driver.
4. After the installation is finished, remove the diskette.
5. Go to "Using the SCSI Utility," later in this chapter.

If the "Update Device Driver" wizard appears...

1. Insert the Adaptec Driver Installer diskette into the diskette drive.
2. Click **Next**.
3. The Device Driver Wizard will not detect the driver. Click **Other Locations**, then type **a:\win95**.
4. Windows detects the host adapter as the *Adaptec AHA-2930U PCI SCSI Controller*. Click **Finish**.
5. When prompted to install the Adaptec Driver Installer diskette, then click **OK**.
6. When prompted for the location of the drivers, type **a:\win95**, then press ENTER.
7. After the installation is finished, remove the diskette.
8. Go to "Using the SCSI Utility," later in this chapter.

Computers with Windows NT 4.0

Note: Windows NT Service Pack 6 is recommended.

1. Start Windows NT 4.0.
2. Click the **Start** button, click **Settings**, then click **Control Panel**.
3. In the **Control Panel** window, double-click **SCSI Adapters**.
4. In the **SCSI Adapters** window, click the **Drivers** tab.
5. In the **Drivers** tab, click **Add**.
6. In the **Install Driver** window, click **Have Disk**.
7. Insert the Adaptec Driver Installer diskette into the diskette drive.
8. In the **Install from Disk** window, type **a:\winnt**, then click **OK**.
9. Click **Adaptec AIC-78xx PCI SCSI Controller Driver** in the list.

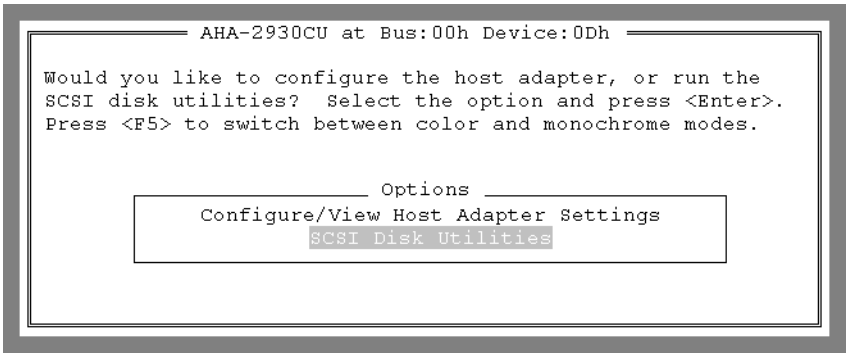
   Note: If an Adaptec AIC-78xx driver is already installed, you'll be prompted for the current or new driver installation. Click **New**.

10. Go to "Using the SCSI Utility," later in this chapter.

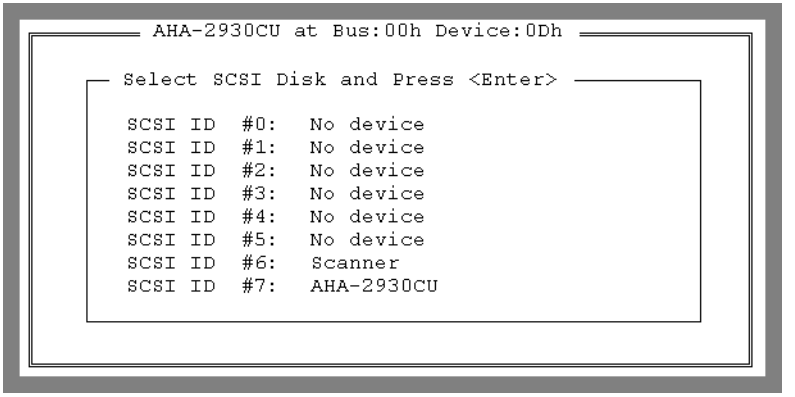
Using the SCSI Utility

1. Reboot the computer.

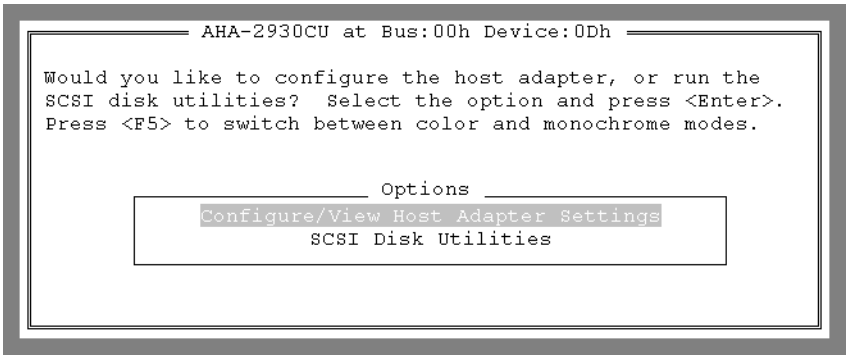
2. When the computer boots up, it will detect the SCSI Adapter. Quickly hit **<Ctrl A>** to access the SCSI Utility.


AHA-2930CU at Bus:00h Device:0Dh
Would you like to configure the host adapter, or run the
SCSI disk utilities? Select the option and press <Enter>.
Press <F5> to switch between color and monochrome modes.
Options
Configure/View Host Adapter Settings
SCSI Disk Utilities

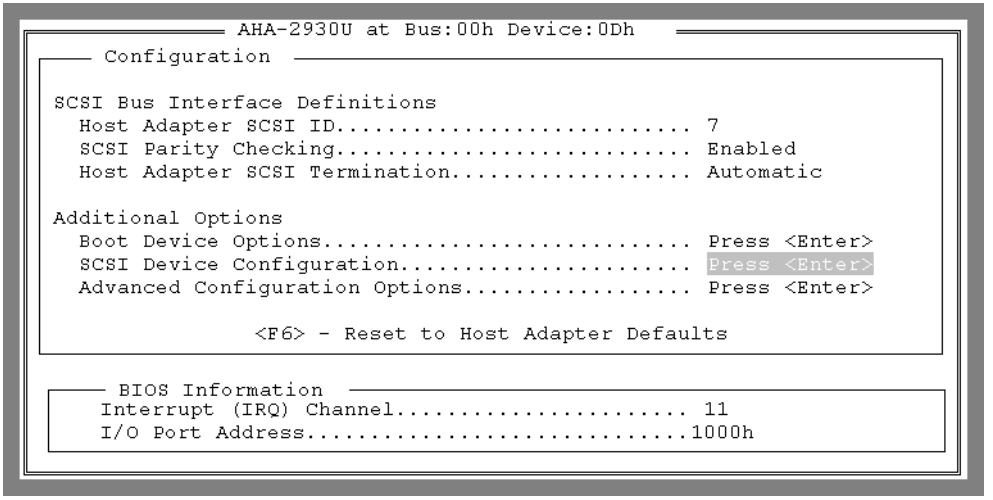
3. In the **Options** menu (see above), select the **SCSI Disk Utilities** option. This will scan the SCSI bus and produce a screen similar to this:


AHA-2930CU at Bus:00h Device:0Dh
Select SCSI Disk and Press <Enter>
SCSI ID #0: No device
SCSI ID #1: No device
SCSI ID #2: No device
SCSI ID #3: No device
SCSI ID #4: No device
SCSI ID #5: No device
SCSI ID #6: Scanner
SCSI ID #7: AHA-2930CU

The card should be recognized on ID#7 and the scanner on the ID you set earlier. Press **<Esc>** to exit.

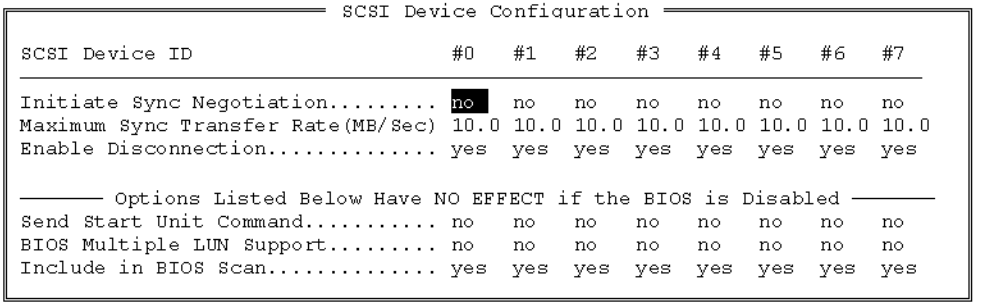

AHA-2930CU at Bus:00h Device:0Dh
Would you like to configure the host adapter, or run the
SCSI disk utilities? Select the option and press <Enter>.
Press <F5> to switch between color and monochrome modes.
Options
Configure/View Host Adapter Settings
SCSI Disk Utilities

4. Back at the **Options** menu, select the **Configure/View Host Adapter Settings** option (see above).

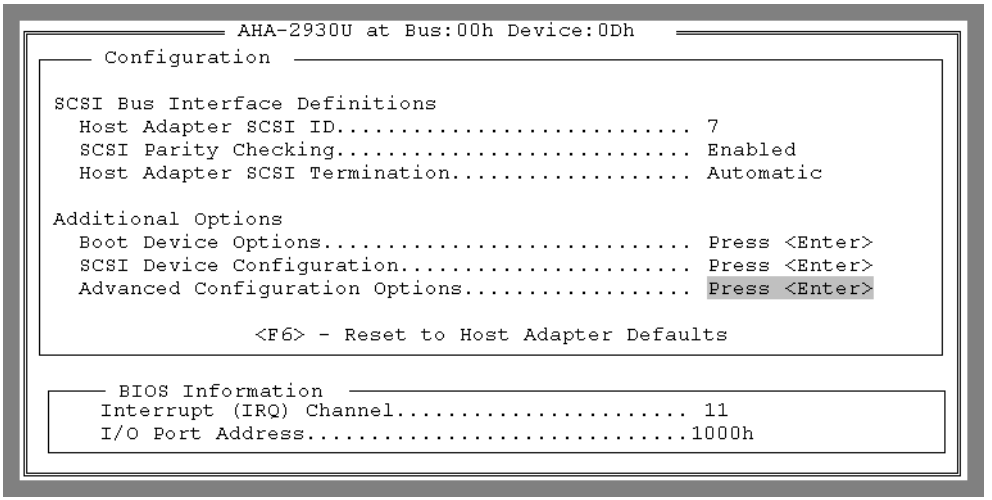


Under **Additional Options**, select **SCSI Device Configuration** (see above). Press **<Enter>**.

5. You will see SCSI Device ID #s 0 to 7. **Initiate Sync Negotiation** will be set to **Yes** or **No**. Set them all to **No**. Press **<Esc>** to exit.


SCSI Device Configuration
SCSI Device ID #0 #1 #2 #3 #4 #5 #6 #7
Initiate Sync Negotiation..... no no no no no no no no
Maximum Sync Transfer Rate(MB/Sec) 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0
Enable Disconnection..... yes yes yes yes yes yes yes yes
Options Listed Below Have NO EFFECT if the BIOS is Disabled
Send Start Unit Command..... no no no no no no no no
BIOS Multiple LUN Support..... no no no no no no no no
Include in BIOS Scan..... yes yes yes yes yes yes yes yes

6. Select **Advanced Configuration Options** (see below) and press **<Enter>**.



Select **Host Adapter Bios**. Set to **Disabled**.

7. Press **<Esc>,** then **SAVE SETTINGS**, then **REBOOT**.

NEXT: You can now operate the digitizer ⇨

Operating

the SIERRA™ *plus* film digitizer

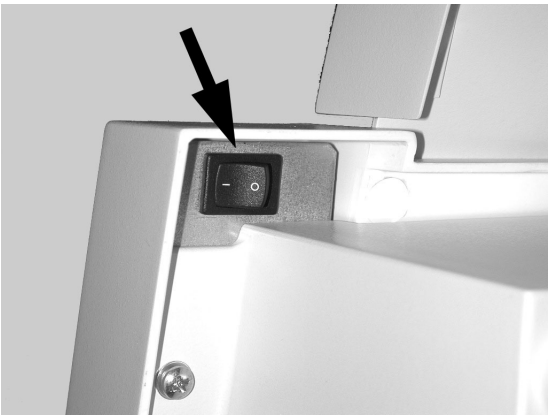
Apply power—then leave on continuously

If the film digitizer is already on and ready to scan (LED on the front of the digitizer is green), then skip this section.

1. Ensure the PC is turned **off**.

> **Note:** Always apply power to the digitizer before turning on the computer. This enables the computer to recognize the digitizer.

2. Turn on the digitizer (the switch is located behind the upper right corner of the digitizer body).



continued

3. Observe the LED on the front of the digitizer: the LED should flash yellow for several minutes. This indicates the digitizer is performing internal tests and calibration.

4. When the LED stops flashing and remains green, turn on the PC.

   The digitizer is now ready to scan films.

Note: Normally, **do not turn off the digitizer**. Leave it on continuously. Turn the PC on and off as needed.

CAUTION: X-ray images displayed on a computer monitor are representative only. Dimensional and grayscale inaccuracies may result from the build-up of tolerances in the digitizer, the display board and the computer. For this reason, special precautions must be exercised when taking measurements from the digitized image. Please refer to the user's manual for your digitizing software for more information.

About films

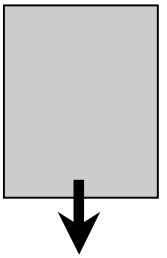
The SIERRA™ *plus* handles standard radiograph films up to 14" x 17" (35.5cm x 43cm).

With multi-film SIERRAs, you can feed multiple films (up to 10), and you can mix film sizes ranging from 8" x 10" (20.5cm x 24.5cm) to 14" x 17" (35.5cm x 43cm) in one stack—as long as you follow the rules below.

> **IMPORTANT:** Remove stickers, tape, staples, paper clips, etc. from films before scanning. These may cause serious film feeding problems. Failure to remove extraneous items from films will void your warranty.

Load films just as you would view them on a light box, with these qualifications:

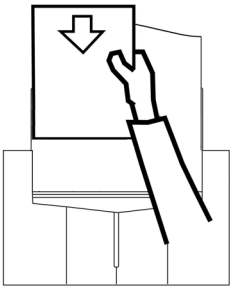
- Films 8" x 10" (20.5cm x 24.5cm) or larger should be fed in portrait orientation, as shown here:



- Films smaller than 8" x 10" (20.5cm x 24.5cm) must be fed in single sheet mode (see “Loading a single film,” the next section).

- Films longer than 17" (43cm) must be fed in single sheet mode (see “Loading a single film,” the next section).

Loading a single film



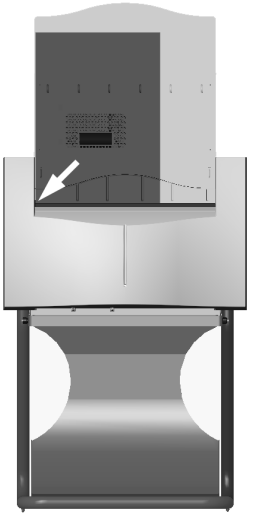
1. Ensure the LED on the front of the digitizer is solid green.
2. Hold the film in front of you as you would view it on a light box.

> **Note:** If you load the film incorrectly, the digitized image may be flipped or rotated.

3. Place the film into the slot **BEHIND the blue area**.

   The blue area is defined by a lip and a groove on the top edge of the digitizer where the feeder is attached. Place a single film directly on the multi-film behind the lip of the blue area.

   When the SIERRA™ *plus* detects the film, it *stages* the film—it pulls the film in about 1" (2.5cm), then pushes the film back out about 1/2" (1.25cm).



> **Note:** When a film has been staged, it is in the digitizer's light path. The ADC (Automatic Digitizer Calibration) feature requires that the light path be clear of the film for proper background calibration of the digitizer. The digitizer will automatically adjust the film's position to properly proceed with ADC. Depending on the location of the film's leading or trailing edge, and the length of time the film has been blocking the light path, the film will be: a) pushed up, b) pushed down, or c) ejected to remove the film from the light path.

continued

4. Using your scanning software, execute the **Scan** command.

   The LED will flash green rapidly, indicating the scan is in progress.

   When the scan is complete, the LED will return to solid green.

> **Note:** After the scan, the film may or may not be ejected—your scanning software determines what happens. If the software's **Auto Eject** function is activated, the film will drop into the exit tray. Otherwise, the lower rollers in the scanner will hold the film until one of the following occurs:
> - Another film is detected.
> - You manually eject the film from the software.
> - The ADC process begins by ejecting the film.

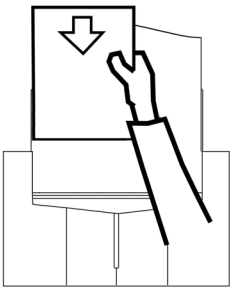
Loading multiple films

The SIERRA™ *plus* can accept **up to 10** films of mixed sizes.

CAUTION: Do not load more than 10 films at one time.

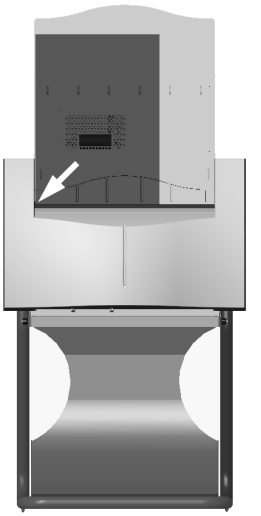
1. Ensure the LED on the front of the digitizer is solid green.

2. Hold the film stack in front of you as you would view the films on a light box.



Films at the back of the stack are digitized first.

3. Align the left edge of the film stack with the film guide on the left edge of the feeder.



4. Place the film stack **IN the blue area**.

The blue area is defined by a lip and a groove below the feed tray. Place the film stack in front of the feeder inside the groove of the blue area.

Note: If you are digitizing a single film, place the film **BEHIND the blue area**.

When the SIERRA™ *plus* detects the first film, it *stages* the film—it pulls the film in about 1" (2.5cm), then pushes the film back out about 1/2" (1.25cm).

continued

Note: When a film has been staged, it is in the digitizer's light path. The ADC (Automatic Digitizer Calibration) feature requires that the light path be clear of the film for proper background calibration of the digitizer. The digitizer will automatically adjust the film's position to properly proceed with ADC. Depending on the location of the film's leading or trailing edge, and the length of time the film has been blocking the light path, the film will be: a) pushed up, b) pushed down, or c) ejected to remove the film from the light path.

5. Using your scanning software, execute the **Scan** command.

   The LED will flash green rapidly, indicating the first scan is in progress.

   When the first scan is complete, the second film will be scanned and so forth, until the last film has been scanned.

   When the entire batch has been scanned, the LED will return to solid green.

   Note: After the scan, the last film may or may not be ejected—your scanning software determines what happens. If the software's **Auto Eject** function is activated, the film will drop into the exit tray. Otherwise, the lower rollers in the scanner will hold the film until one of the following occurs:
   - Another film is detected.
   - You manually eject the film from the software.
   - The ADC process begins by ejecting the film.

Troubleshooting

the SIERRA™ *plus* film digitizer

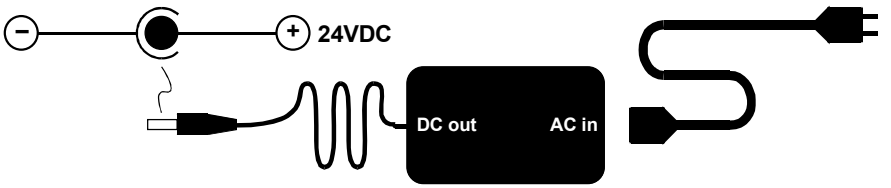
WARNING

Do not open or disassemble the film digitizer. There are no user-serviceable parts inside. Repairs can only be performed by qualified service personnel. If service is required, contact your authorized VIDAR representative or VIDAR Systems Corp.

Normal operation

LED indication	Condition
Flashing yellow	You must wait
Flashing red	Contact medtech@vidar.com
Solid green	Ready to scan
Flashing green	Scan in progress

Power supply information



In case of difficulty

How to use this section:

1. Look through the left columns to find a description of the problem you are having.
2. Follow the instructions (in order) in the "Corrective action" column. If the one corrective action doesn't solve the problem, then carry out the next corrective action.
3. When the instruction is "Get qualified technical help," then:
   a. Contact your system integration specialist (the company or person that installed your VIDAR film digitizer).
   b. If your system integration specialist isn't available, then contact VIDAR Customer Support (medtech@vidar.com). Please record system information before calling, and have it available when calling (see Appendix).

Error conditions

LED indication	Condition	Corrective action
Fast flashing red.	Normalization error.	Get qualified technical help.
No LED...	and scanner functions correctly.	Get qualified technical help.
No LED...	and scanner does not function.	1. Ensure that power cable is properly plugged into digitizer (power cable enters below mounting bracket). If digitizer then appears normal, wait for solid green LED, then reboot PC. ***or if that doesn't solve the problem...*** 2. Ensure that electrical power cord is properly plugged into power supply. If digitizer then appears normal, wait for solid green LED, then reboot PC. ***or if that doesn't solve the problem...*** 3. Get qualified technical help.

Operational problems

Symptom	Corrective action
Film tilts or skews during scanning.	1. Ensure individual films are loaded properly: bottom edge of film parallel to rollers, left edge of film up against digitizer body—as far left as it will go. (Review "Loading a single film" in "Operating" chapter.) 2. (*Multi-film feeder only*) Ensure multiple films are loaded properly: Insert first film into entrance slot and allow it to stage. 3. Remove any foreign matter from film entrance slot. 4. If problem persists, get qualified technical help. 5. Ensure idler rollers spin freely. 6. Ensure pickup roller is clean (see "Cleaning the multi-film feed tray," later in this chapter).
After film is loaded and staged properly, a few minutes later film is pushed out of staging area.	When film is staged, it is over digitizer's light path. SIERRA's ADC (Automatic Digitizer Calibration) feature requires that light path be clear for proper background calibration. Thus, if film remains in digitizer for more than 5 minutes, it will be pushed up 1/4" (0.6cm) to clear light path. Later, when you execute your software's **Scan** command, film will be re-staged before it is digitized.
Scanning software's auto-eject is not activated, but films drop into exit tray after a few minutes.	After film is scanned, it is still over digitizer's light path. SIERRA's ADC (Automatic Digitizer Calibration) feature requires that light path be clear for proper background calibration. Thus, if film remains in digitizer for more than 5 minutes, it will be ejected.
Digitizer has been off for several days. First film misfeeds or jams.	Run three or four films through digitizer: load films one at a time, then eject each one (or perform a scan on each film, but this takes longer).
Can't turn digitizer on or off. Can't find power switch.	The on/off switch is located behind the upper right corner of the digitizer body (when viewed from the front). If the digitizer is mounted on the table-top stand, look at the digitizer from the rear to see the switch.

continued

Symptom	Corrective action
Multi-film feed tray won't feed films.	The multi-film feed tray must be connected to the digitizer with the multi-film feed tray cable. The cable is located above the digitizer body, on the left side (when viewed from the front). Ensure the cable is present. Ensure one end of the cable is plugged into the jack on the multi-film feed tray, and the other end is plugged into the digitizer. After checking cable and connections, restart digitizer, then restart PC after LED turns green.
After applying power, LED on front keeps flashing yellow.	After power is applied, digitizer normally requires about 3.5 minutes to normalize and calibrate, during which time the LED will flash yellow. If LED flashes yellow for more than 5 minutes, reset digitizer or turn power off and on again (both procedures described later in this chapter).
LED remains dark, in spite of using proper power-on procedure described later in this chapter.	1. Ensure wall outlet is providing AC power: obtain another electrical device known to be working, and plug it into that AC wall outlet. ■ If other device doesn't work, AC power is not available at that wall outlet. Get help from building services. ■ If other device does work, AC power is available from that outlet. Go to step 2. 2. With power applied to digitizer, look into digitizer film entrance slot. If you see light coming from inside digitizer, power is on. For this condition (LED dark, internal light on), get qualified technical help. 3. If you have another SIERRA film digitizer, try its power supply. ■ If digitizer works with other power supply, original power supply is defective. Obtain replacement VIDAR SIERRA power supply from your system integration specialist. **Do not substitute any other power supply.** ■ If digitizer does not work with other power supply, digitizer is defective. Get qualified technical help.

continued

Symptom	Corrective action
Film starts and stops during scanning.	1. Increase memory allocation for scanning software. (Especially if scanning at high resolutions, memory allocation must be sufficient to accept data stream from digitizer.) 2. If scanning to disk, ensure sufficient space is available on disk drive. 3. Ensure PC has enough memory available to support scanning application. Close applications not needed for image acquisition from digitizer. 4. If problem persists, get qualified technical help.
Digitizer stops scanning and PC locks up.	1. Reset entire system. Remember that SCSI protocol requires that digitizer be powered before PC. a. Turn digitizer off. b. Shut down PC and turn it off. c. Turn digitizer on. d. After digitizer LED turns solid green, turn on PC. 2. Launch scanning software on PC, then try scanning again. If problem persists, get qualified technical help.

Turning the digitizer on and off

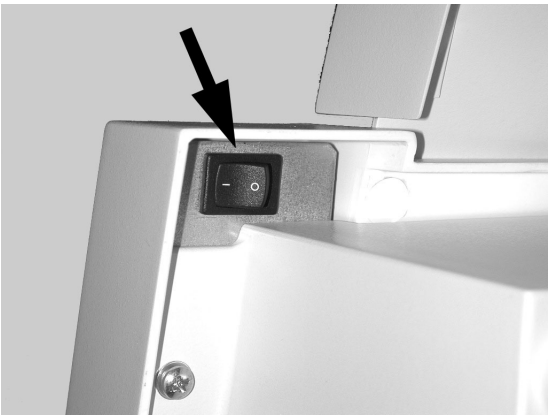
WARNING

Do not apply power by plugging the DC power connector into the digitizer while the power supply is live. Do not remove power by unplugging the DC power connector from the digitizer while the power supply is live. Either of these actions could permanently damage the digitizer, the power supply or both.

Note: SIERRA was designed to be powered continuously. Under normal conditions, the digitizer should remain on at all times.

Use only the power switch to turn the digitizer on or turn it off:

The power switch is located behind the upper right corner of the digitizer (when viewed from the front).



Cleaning the multi-film feed tray

After extensive use, dust or lint particles may build up on the feed roller and idler wheels.

To remove residue, loop a piece of light adhesive tape (such as Scotch® Magic™ Tape) around your fingers with the adhesive side out, then gently pat the roller and wheels as you turn them.

CAUTION:

- **Do not** use any type of cleaning solvent on the feed roller and idler wheels, as this could damage these components and cause improper operation.
- **Do not** use tape with a strong adhesive, such as packing tape or strapping tape.
- **Do not** use tape requiring the adhesive to be wetted, such as brown paper packing tape.

Appendix

warranty information and customer survey

Warranty information and customer survey

for VIDAR film digitizers

VIDAR systems corporation
Medical Imaging

Instructions:
1. Cut along dotted line at left.
2. Fill in.
3. Make a copy for your records.
4. E-mail or fax to VIDAR.

460 Spring Park Place
Herndon, VA 20170 USA
Phone: (703) 471-7070 ● Fax: (703) 471-7665
E-mail: medtech@vidar.com

Warranty information

Date _____

System integrator information

System integrator administrative contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

System integrator technical contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

Shipping information

Company name		
Street address		
City	State	Postal code
Country	Telephone no.	Fax no.

Product information

What product are you registering? (Select only one)

☐ VXR-12 Plus ☐ DiagnosticPRO ☐ SIERRA single-sheet ☐ SIERRA *plus*

☐ TeleradPRO ☐ DiagnosticPRO *plus* ☐ SIERRA multi-sheet

What is the product's serial number?_____

Where is this film digitizer installed? (Or where will it be installed?)

☐ Hospital ☐ Office

☐ Clinic ☐ Other _____

Why did you purchase this product? (Select all that apply and rate importance)

Feature	Not important				Important
☐ Price	1	2	3	4	5
☐ Performance	1	2	3	4	5
☐ Style	1	2	3	4	5
☐ Reliability	1	2	3	4	5
☐ Size	1	2	3	4	5
☐ Maintenance record	1	2	3	4	5
☐ Image quality	1	2	3	4	5
☐ Packaging	1	2	3	4	5
☐ Documentation	1	2	3	4	5
☐ Software (TWAIN)	1	2	3	4	5
☐ Multi-sheet capability	1	2	3	4	5
☐ Service and support	1	2	3	4	5
☐ Other _____	1	2	3	4	5

End user information

End user administrative contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

End user technical contact

Name	Title
Company name	Telephone no.
E-mail address	Fax no.

System configuration

If you can't provide this information or are unsure about how to obtain it, please contact VIDAR's Medical Support Team at (703) 471-7070 or medtech@vidar.com.

Hardware

Host computer

Brand, model number	
Motherboard brand, model number	
CPU brand and model number	
Memory type and amount	

Hard drive(s)

Drive letter	C	D	E	F	Other:
Brand, model					
Size					
IRQ					
I/O address					
Driver					
Logical/physical					
Speed (read, write)					
Format type					

CD-ROM drive

Drive letter	C	D	E	F	Other:
Brand, model					
IRQ					
I/O address					
Driver					
Speed (read)					

CD-R/W drive

Drive letter	C	D	E	F	Other:
Brand, model					
IRQ					
I/O address					
Driver					
Speed (read, write)					

Diskette drive

Drive letter	A	B	Other:
Brand, model			
Capacity			
IRQ			
I/O address			
Driver			

Serial ports

Port number	Com 1	Com 2	Com 3	Com 4	Other:
IRQ					
I/O address					
Active (Y/N)					
Device on port					
Driver					

USB ports and hub

Port number	1	2	3	4	Other:
IRQ					
I/O address					
Active (Y/N)					
Device or port					
Driver					
Hub brand and model:			Hub configuration:		

Parallel ports

Port number	LPT1	LPT2	Other:
IRQ			
I/O address			
Active (Y/N)			
Device on port			
Driver			

Video adapter

Brand, model	
BIOS, revision date	
Hardware revision	
Type (AGP, standard)	
Single or dual	
IRQ	
I/O address	
Memory size	
Driver	
Settings	

Display

Brand	
Model	
Settings	

SCSI adapters

Brand			
Model			
BIOS version			
H/D revision			
No. of devices connected (detail in next table)			

SCSI devices

SCSI ID	0	1	2	3	4	5	6	7
Device name								
Active (loaded), Y/N								
Device driver								
Cable type								
Cable length								
Total cable length for chain								

Digitizer

Serial number	
Model number	
Firmware version	
Hardware version	
SCSI ID	
SCSI termination (on/off)	
Passcode	
Passcode extension	

Software

Operating system

Name	
Version	
Build date	
Service pack	
Patches	
Settings	

Scanning software

Name	
Version	
Build date	
Service pack	
Patches	
Settings	
DICOM compliant?	

Scanning parameters

Resolution	
Bit depth	
Autosize	
Integration time	
Line averaging	
Scan to disk	
Scan to screen	